UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,096	02/27/2002	Vishal Anand	US 028017	2846

24738	7590	08/04/2006

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
1109 MCKAY DRIVE, M/S-41SJ
SAN JOSE, CA 95131

EXAMINER
PARK, ILWOO

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 May 2006_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-15_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

5/16/2006 has been entered

2.   Holden was cited in the last office action. Claims 1-15 are presented for

examination

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Holden,

US patent No. 5,583,861.

As to claim 1, Holden teaches a multiple-input queuing system comprising:

a buffer [cell buffer pool 100 in fig. 5; col. 6, lines 18-21] that includes a plurality

of memory-elements,

an allocator that is configured to, at a time [col. 7, lines 21-24] at which a data-

item from a select input-stream of a plurality of input-streams to be stored, allocate [col.

6, lines 1-3; col. 7, lines 21-24] any currently-unused memory-element [empty or

available cell memories: col. 7, line 61-col. 8, line 9; col. 8, lines 61-67] of the plurality of

memory-elements for storing a data-item from a select input-stream of a plurality of

input-streams, and

a mapper that is configured to: receive [col. 6, lines 63-65] a request for an

output corresponding to the select input-stream, determine [col. 6, lines 57-67] an

address associated with the memory-element, based on the request for the select input-

stream, and provide the data-item from the memory-element as the output, based on

the address associated with the memory-element.

5.   As to claim 2, Holden teaches a first switch [input crosspoint 110 in fig. 5],

operably coupled to the allocator, that is configured to route the data-item from the

select input-stream to the memory-element.

6.   As to claim 3, Holden teaches a second switch [output crosspoint 120 in fig. 5],

operably coupled to the mapper, that is configured to route the data-item from the

memory-element to the output.

7.   As to claim 4, Holden teaches the allocator is further configured to allocate the

memory-element based on a request from the select input-stream for an allocation [col.

2, lines 45-50].

8.   As to claim 5, Holden teaches the allocator is further configured to: receive

allocation requests from other input-streams of the plurality of input-streams, determine

a relative priority of the allocation requests from the other input-streams and the request

from the select input-stream, and identify the select input-stream, based on the relative

priority [col. 2, lines 28-32].

9.   As to claim 6, Holden teaches the allocator is further configured to: receive

allocation requests from other input-streams of the plurality of input-streams, and

allocate other memory-elements of the plurality of memory-elements for storing other

data-items from the other input-streams [col. 14, lines 33-45].

10.   As to claim 7, Holden teaches the allocator is configured to allocate the other

memory-elements contemporaneously with allocating the memory-element for storing

the data-item from the select input-stream [col. 14, lines 33-45].

11.   As to claim 8, Holden teaches the mapper that is further configured to: receive

requests for outputs corresponding to the other input-streams, determine addresses

associated with the other memory-elements, based on the request for the other input-

streams, and provide the other data-items from the other memory-element as outputs

from the multiple-input queuing system, based on the addresses associated with the

other memory-element [col. 6, lines 57-67].

12.   As to claim 9, Holden teaches a buffer system that is configured to receive data

from a plurality of input-streams, the buffer system comprising:

        a plurality of memory-elements [col. 6, lines 18-21],

        a plurality of input-multiplexers [col. 6, lines 21-25], each input-multiplexer being

coupled to a memory-element of the plurality of memory-elements, and

        an allocator [col. 6, lines 1-3], operably coupled to the plurality of memory-

elements, that is configured to couple one or more input-streams of the plurality of input-

streams to corresponding one or more memory-elements, via allocation commands to

the plurality of input-multiplexers [col. 6, lines 25-28], wherein the allocator, at a time

[col. 7, lines 21-24] at which a data-item from a select input-stream of a plurality of

input-streams to be stored, allocates [col. 6, lines 1-3; col. 7, lines 21-24] any currently-

unused memory-element [empty or available cell memories: col. 7, line 61-col. 8 line 9;

col. 8, lines 61-67] of the plurality of memory-elements for storing a data-item from a

select input-stream of the plurality of input-streams.

13.   As to claim 10, Holden teaches a mapper, operably coupled to the allocator, that

includes:

a memory [col. 6, lines 42-46] that is configured to store information

corresponding to the allocation commands, and

a multiplexer [fig. 6], operably coupled to the memory, that is configured to

access the information corresponding to the allocation commands, and to thereby

provide an identification of the one or more memory-elements corresponding to a select

input-stream of the plurality of input-streams, and

an output-multiplexer [output crosspoint 120 in fig. 5], operably coupled to the

plurality of memory-elements and to the mapper, that is configured to couple a select

memory-element of the plurality of memory-elements to an output of the buffer system,

based on the identification of the one or more memory-elements corresponding to the

select input-stream.

14.   As to claim 11, Holden teaches the memory of the mapper includes a plurality of

queues, each queue of the plurality of queues corresponding to each input-stream of

the plurality of input-streams [col. 6, lines 42-46].

15.   As to claim 12, Holden teaches a method of buffering data-items from a plurality

of input-streams, including:

receiving [col. 2, lines 45-50] an input-notification from one or more input-streams

of the plurality of input-streams,

at a time [col. 7, lines 21-24] at which a data-item from a select input-stream of a

plurality of input-streams to be stored, allocating [col. 6, lines 1-3; col. 7, lines 21-24] as

a select memory-element any currently-unused memory-element [empty or available

cell memories: col. 7, line 61-col. 8, line 9; col. 8, lines 61-67] memory-element of a

plurality of memory-elements to a select input-stream of the one or more input-streams,

storing [col. 6, lines 18-21] a received data-item from the select input-stream to

the select memory-element,

storing [col. 6, lines 57-67] an identification of the select memory-element

corresponding to the select input-stream,

receiving [col. 6, lines 33-40] an unload request that identifies the select input-

stream, and

providing [col. 14, lines 46-50] the received data-item from the select memory-

element, based on an identification of the select memory-element corresponding to the

select input-stream.

16.   As to claim 13, Holden teaches allocating a plurality of select memory-elements

of the plurality of memory-elements to a plurality of select input-streams of the one or

more input-streams, storing a received data-item from each of the plurality of select

input-streams to a corresponding each of the plurality of select memory-elements, and

storing an identification of each of the plurality of select memory-elements

corresponding to each of the plurality of select input-streams [col. 14, lines 30-55].

17.   As to claim 14, Holden teaches storing the identification of the select memory-

element includes placing the identification in a first-in-first-out queue that is associated

with the select input-stream, and providing the received data-item includes removing the

identification from the first-in-first-out queue that is associated with the select input-

stream [col. 6, lines 42-67].

18.   As to claim 15, Holden teaches each memory-element of the plurality of memory-

elements is dynamically classifiable as currently-used and currently-unused; allocating

the select memory-element includes: identifying one of the plurality of memory-elements

that is classified as currently-unused as the select memory-element, and classifying the

select memory-element as currently-used; and providing the received data-item

includes classifying the select memory-element as currently-unused [col. 6, lines 42-67].

Response to Arguments

19.   Applicant's arguments filed 3/14/2005 have been fully considered but they are

not persuasive. Applicant argues that a) the link list RAM of Holden determines in

advance what memory element a data-item from a particular stream will be stored; thus,

using any currently-unused memory element, as in the present invention, would wreak

havoc on the system of Holden.

For the point a), Holden teaches the link list RAM does not determine in advance

what memory element a data-item from a particular stream will be stored using a

memory element for storing a data-item of a select input-stream; rather, the link list

RAM is used for priority and destination of the cell that has been stored in cell memory

[col. 7, lines 24-32] and used for providing an input buffer pointer specifying where the

input cell is not being stored but currently stored [col. 6, lines 65-67], further, Holden

teaches [col. 5, lines 58-63], using any currently-unused memory element wouldn't

wreak havoc on the system of Holden.

Conclusion

20.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155.

The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30

PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system see http://pair-direct.uspto.gov. Should you
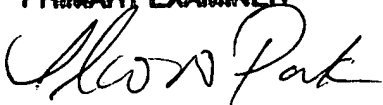
have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK
PRIMARY EXAMINER

Ilwoo Park

August 2, 2006